



Alto 299

Chemical Product	CAS #	Breakthrough time (minutes)	Permeation level	Standard	Degradation level	Rating
2-Propanol (Isopropanol) 99%	67-63-0	64	3	EN 374-3:2003	NT	NT
Acetone 99%	67-64-1	19	1	EN 374-3:2003	NT	NT
Dichloromethane (Methylene Chloride) 99%	75-09-2	2	0	EN 16523-1:2015	NT	NT
Dimethylformamide 99%	68-12-2	127	4	EN 374-3:2003	4	++
Ethanol 95%	64-17-5	70	3	EN 374-3:2003	NT	NT
Formaldehyde 37%	50-00-0	480	6	EN 16523-1:2015	4	++
Hydrochloric acid 10%	7647-01-0	480	6	EN 374-3:2003	NT	NT
Hydrochloric acid 35%	7647-01-0	480	6	EN 374-3:2003	NT	NT
Hydrogen peroxide 30%	7722-84-1	480	6	EN 16523-1:2015	4	++
Methanol 99%	67-56-1	42	2	EN 374-3:2003	4	+
Methyl Ethyl Ketone (2-Butanone) 99%	78-93-3	11	1	EN 16523-1:2015	NT	NT
n-hexane 95%	110-54-3	2	0	EN 374-3:2003	NT	NT
N-N dimethyl acetamide 99%	127-19-5	41	2	EN 374-3:2003	NT	NT
Nitric acid 65%	7697-37-2	480	6	EN 16523-1:2015	4	++
Sodium hydroxide 20%	1310-73-2	480	6	EN 374-3:2003	NT	NT
Sodium hydroxide 40%	1310-73-2	480	6	EN 16523-1:2015	4	++
Sodium hydroxide 50%	1310-73-2	480	6	EN 374-3:2003	NT	NT
Styrene 99%	100-42-5	9	0	EN 374-3:2003	NT	NT
Sulfuric acid 96%	7664-93-9	268	5	EN 16523-1:2015	3	++
Toluene 99%	108-88-3	4	0	EN 16523-1:2015	NT	NT
Xylene 99%	1330-20-7	8	0	EN 374-3:2003	NT	NT

*not normalized result

Overall Chemical Protection Rating

Protection rating is determined by taking into account the effects of both permeation and degradation in an attempt to provide users with an overall protection guideline when using our glove products against specific chemicals.

- Used for **high chemical exposure** or chemical immersion, limited to breakthrough time based on a working day.
- Used for **repeated chemical contact**, limited to total chemical exposure i.e. : accumulative breakthrough time based on a working day.
- **Splash protection only**, on chemical exposure the gloves should be discarded and new gloves worn as soon as possible.
- **Not recommended**, these gloves are deemed unsuitable for work with this chemical.

NT : Not tested

NA : Not applicable because not fully tested (only degradation OR permeation results)

The chemical test data and overall chemical protection rating should not be used as the absolute basis for glove selection. Actual in-use conditions may vary glove performance from the controlled conditions of laboratory tests. Factors other than chemical contact time